No.



8200123

HAIB OVIATED STANTES OF WATERIOW

TO MILTO WHOM THESE PRESENTS SHML COME;

Pairyland Seed Company, Inc.

Telliereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen years from the date of this grant, subject to the payment of the required fees and periodic replenishment of viable basic seed of the variety in a public repository as provided by EAW, the right to exporting it, or exporting it, or offering it for sale, or reproducing it, porting it, or exporting it, or using it in producing a hybrid or different y therefrom, to the extent provided by the Plant Variety Protection Act. United States seed of this variety (1) shall be sold by variety name only as f certified seed and (2) shall conform to the number of generations the owner of the rights. (84 stat. 1542, as amended, 7 u.s.c. 2321 et seq.)

SOYBEAN

'DSR-320'

In Ecstimony Willowrot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 29th day of September in the year of our Lord one thousand nine hundred and eighty-three.

John R Blook General of Agriculture

Attast

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ommissioner Vant Variety Protes

Plant Variety Protection Office Grain Division

Agricultural Marketing Service

UNITED STATES DEPARTMENT OF AGRICULTURE FORM APPROVED AGRICULTURAL MARKETING SERVIC OMB NO. 40-R3822 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION No certificate for plant variety protection may APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE be issued unless a completed application form has been received (5 U.S.C. 553). INSTRUCTIONS: See Reverse. TEMPORARY DESIGNATION OF 1b. VARIETY NAME FOR OFFICIAL USE ONLY VARIETY R/S PV NUMBER 8200123 A268P DSR-320 KIND NAME 3. GENUS AND SPECIES NAME TIME FILING DATE A.M. 11:30 **Χ**Μ. 5/14/82 Soybean Glycine MAX FEE RECEIVED DATE 500.00 5/14/82 FAMILY NAME (BOTANICAL) 5. DATE OF DETERMINATION 250.00 9/19/83 Leguminosae December 1979 NAME OF APPLICANT(S) 7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP TELEPHONE AREA CODE AND NUMBER Dairyland Seed Company, Inc. P. O. Box 958 3570 Hwy. H West Bend, WI 414-338-016<u>3</u> IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF 10. IF INCORPORATED, GIVE STATE AND 11. DATE OF INCOR-ORGANIZATION: (Corporation, partnership, association, etc.) DATE OF INCORPORATION PORATION Dec., 1963 Wisconsin Corporation NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE 12. ALL PAPERS: Dairyland Seed Company, Inc. Thomas G. Strachota P. O. Box 958 West Bend, WI 53095 CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED: 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.) X 13B. Exhibit B, Novelty Statement. X 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.) X 13D. Exhibit D, Additional Description of the Variety. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED NO SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) X YES DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUC-14b. TION BEYOND BREEDER SEED? LIMITED AS TO NUMBER OF GENERATIONS? X YES **FOUNDATION** REGISTERED 1 CERTIFIED DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? X NO (If "Yes," give 15a name of countries and dates. 15b, HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.) DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? YES NO The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties. (SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.



- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties:

 (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

Exhibit A, Origin and Breeding History of the Variety

DSR-320 is a F6 derived line from the cross of Wayne x Hark by the pedigree method of breeding with early generation yield testing.

Year Ge	neration	Procedure
1967	F ₀	Initial Hand Cross
1967(Winter)	F_1	Grow Out
1968	F2	Single Plant Selection
1968(Winter)	F3	Increase
1969	F ₄	Replicated Yield Trial, Reselection
1970	F5	Replicated Yield Trial
1971	F6	Single Plant Selection
1972	F7	Preliminary Yield Test
1973	F8	Replicated Yield Test
1974	F9	Replicated Yield Test, Reselection
1975	F10	Replicated Yield Test
1976	F11	Reselect for White Flower Color
1977	F12	Replicated Yield Test
1978	F13	Mass Selection for Phytophthora
		root rot Tolerance
1979	F14	Replicated Yield Test, First Increase
1980	F15	Replicated Yield Test, Second Increase
1981	F16	Replicated Yield Test, Third Increase

Addition to PVP Application: 8200123, 'DSR 320'

'DSR 320'

Addition to Exhibit A

13A 3,4 Variants and Evidence of Uniformity and Stability

Over the last four years of increase the following variants have been found.

		Percent
2 3	 Medium to Dark buff Gray Solid buff colored seed coats Other hilums: Imperfect black, and black 	.016 .013 .003 .001
Plant - Pubescence Color	: Tawny	.013

Exhibit B, Novelty

DSR-320 is visually most similar to DSR-207 in general plant characteristics. However, it differs in two important and readily apparent characteristics. DSR-320 has a very light to extremely light buff hilum color and gray pubescence, whereas DSR-207 has a brown hilum and brown pubescence.

FORM GR-470-2 (6-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782

DSR-320

EXHIBIT C (Soybean)

•	OBJECTIVE DESCRIPTION OF VARIETY
STRUCTIONS: See Reverse.	SOYBEAN (GLYCINE MAX)

NAME OF APPLICANT(S)	
Dairyland Seed Company, Inc.	FOR OFFICIAL USE ONLY
ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code)	PVPO NUMS 200123
P. O. Box 958, 3570 Hwy. H	VARIETY NAME OR TEMPORARY
West Bend, WI 53095	DESIGNATION
	DSR-320
Place the appropriate number that describes the varietal cha	racter of this variety in the boxes below.
,	
1 = SPHERICAL 2 = SPHERICAL 3 = ELONGA	TE 4 = OTHER (Specify)
2. SEED COAT COLOR:	· ISHADE:
1 1 = YELLOW 2 = GREEN 3 = BROWN	4 = BLACK 2 1 = LIGHT 2 = MEDIUM 3 = DARK
5 = OTHER (Specify) 3. SEED COAT LUSTER:	
r	4. SEED SIZE
2 = SHINY	GRAMS PER 100 SEEDS
5. HILUM COLOR:	SHADE:
$\frac{R/5}{2} \frac{12/3/82}{1 = \text{BUFF}} = \frac{2 = \text{YELLOW}}{3 = \text{BROWN}} = \frac{4 = \text{GRAY}}{4 = \text{GRAY}}$	5 = IMPERFECT
6 = BLACK 7 = OTHER (Specify) VERY MEST TO	I I - FIGHT X - MEDIUM 3 = DAKK
6. COTYLEDON COLOR:	
1	7. LEAFLET SIZE (See Reverse):
1 1 = YELLOW 2 = GREEN	2 1 = SMALL 2 = MEDIUM 3 = LARGE
8. LEAFLET SHAPE:	
1 = OVATE 2 = OBLONG 3 = LANCEOLATE 4 =	ELLIPTICAL 5 = OTHER (Specify)
9. LEAF COLOR (See reverse):	10. FLOWER COLOR:
3 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK C	•
• <u> </u>	REEN 1 = WHITE 2 = PURPLE 3 = OTHER (Specify)
	12: POD SET:
	1 1 = SCATTERED 2 = CONCENTRATED
13. PLANT PUBESCENCE COLOR:	¹ SHADE:
1 = GRAY 2 = BROWN 3 = OTHER (Specify)	
A PLANT TYPES (S D.	1 1 = LIGHT 2 = MEDIUM 3 = DARK
	15. PLANT HABIT:
3 1=slender 2=Bushy 3=Intermediate	1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER (Specify)
6. HYPOCOTYL COLOR:	2 3 = OTHER (Specify) 17. SEED PROTEIN:
I 1= GREEN 2= PURPLE	1 = A 2 = B
8. NUMBER OF DAYS TO FLOWERING 19. MATURITY GROUP:	
	= 0 3 = 1 4 = 11 5 = 111
5 2 5 6 = iv 7 =	FV 8 = VI 9 - VII 10
0. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (e.g. 0 2) when size is 9 mm. or less.)	(Growth Chamber) AT 25° C. (Place a zero in first box
MM. LENGTH MM. LENGTH	MM. WIDTH
OF COTYLEDON 1. DISEASE: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)	OF COTYLEDON
BACTERIAL	
Ulpustule () Cyst O Downt O P	TAIN 0 POD AND 0 ROOT KNOT
O FROGEYE O STEM T PHYTO-	PROWN
CANKER I PHTHORA US	TEM ROT 0 SPOT 0 BROWN SPOT 5
0 BLIGHT 0 WILDFIRE 0 RHIZOCTONIA O	THER (Specify)

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	DSR 207	Petiole angle	Wayne
Leaf shape		Seed size	
Leaf color	We find	Seed shape	
Leaf surface		Seedling pigmentation	

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

	NO. OF DAYS LODG			LEAF SIZE		CONTENT		AVERAGE NO.	
	TO MATURITY	MATURITY SCORE		Width	Length	Protein	Oil	OF PODS PER PLANT	IODINE NO.
Submitted	139	1.5	70 cm	135	138		%	119	
Name of similar variety DSR 207	130	1.5	67 cm	147	157			80	

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

- 1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
- 2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
- 3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"'Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	''Adelphia''



DSR-320

Exhibit D, Additional Description of the Variety

Additionally, DSR-320 differs from DSR-207 in having a dark leaf color whereas DSR-207 has a medium green leaf color.

